

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Gulf Island Fabrication, Inc.
East Yard, West Yard, & North Yard
Houma, Terrebonne Parish, Louisiana
Agency Interest Number: 9789
Activity Number: PER20040004
Proposed Permit Number: 2880-00059-V1**

I. APPLICANT

Company:
Gulf Island Fabrication, Inc.
PO Box 310
Houma, Louisiana 70361-0310

Facility:
East Yard, West Yard, & North Yard
583 Thompson Rd
Houma, Terrebonne Parish, Louisiana
Latitude 32° 01' 48", Longitude 93° 20' 47"

II. FACILITY AND CURRENT PERMIT STATUS

Gulf Island, L.L.C., a division of Gulf Island Fabrication, Inc., operates a structural steel fabrication facility consisting of three "yards" in Houma, LA. The facility fabricates steel structures used for offshore exploration and production activities. The East (Main) Yard is located at 583 Thompson Road and the North Yard is located at 730 Thompson Road. The West Yard is segregated by the Houma Navigation Canal and is located at 301 Bayou Dularge Road.

Gulf Island Fabrication Inc. has operated the East Yard facility since acquiring it from Delta Services Industries in June 1985. The facility is bordered on the west side by the Houma Navigation Canal, which segregates the West Yard from the East and North Yard. The West Yard is bordered on its west by the Houma Navigation Canal and by HWY 315 on its east. It was acquired in 1989 from Park Corporation.

On December 8, 1992, the East Yard obtained its original Permit No. 2880-00059-00, and the West Yard obtained Permit No. 2880-00058-00 to bring both facilities into compliance with Louisiana Air Quality Regulations.

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The East Yard and West Yard constructs structural steel fabrication jackets, decks, pilings and complete piping systems. Blasting and coating are also performed on this yard. Inspection Field offices are also included.

The facility plans to expand into shipbuilding and ship repair. The West Yard will also house the Marine Division's Headquarters. Plans call for automated blasting/painting, computerized cutting table, automated panel line and the expansion of the fabrication shop. Future plans also call for a dry-dock for launching new vessels and for repair work on existing vessels.

The North Yard was formally operated as Southport Yard, previously doing business in Harvey, Louisiana operating under Permit No. 1340-00153-01 dated November 30, 1998. The facility closed in December 2000. In May 2001, a new facility was constructed in Houma.

The North Yard's focus is the fabrication of housing for the offshore oil and gas industry. It provides living quarters of all sizes, electrical buildings, control centers, and helidecks. It specializes in construction, maintenance and repairs of liftable buildings, and provides technical expertise and service.

The East Yard, West Yard, & North Yard facility is a designated Part 70 source. Several permits have been issued to the operating units.

These include:

Permit No.	Unit or Source	Date Issued
2880-00059-00	Main Yard	12/08/1992
2880-00058-00	West Yard	12/08/1992
2880-00059-01	Main Yard	08/08/1995
2880-00058-01	West Yard	08/08/1995
2880-00059-V0	East Yard (Main), West Yard, & North Yard	09/15/2002

An application for a Part 70 permit modification is still under review by the department. This application included the following sources:

Permit No.	Unit or Source	Date Issued
2880-00059-V1	East Yard (Main), West Yard, & North Yard	

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III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application and Emission Inventory Questionnaire were submitted by Gulf Island Fabrication, Inc. on January 29, 2007 requesting a Part 70 operating permit modification. Additional information dated July 24, 2007 and November 28, 2007 was also received.

Project

The facility plans to expand into shipbuilding and ship repair. The West Yard will house the Marine Division's Headquarters. Plans call for automated blasting/painting, computerized cutting table, automated panel line and the expansion of the fabrication shop. Future plans also call for a dry-dock for launching new vessels and for repair work on existing vessels.

Proposed Permit

Permit 2880-00059-V1 will be the Part 70 operating permit modification of the Part 70 operating permit 2880-00059-V0 for the East Yard, West Yard, & North Yard facility.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	44.42	100.28	+55.86
SO ₂	12.51	11.79	-0.72
NO _x	130.81	179.97	+49.96
CO	28.17	39.21	+11.04
VOC	238.56	154.02	-84.54

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

The maximum uncontrolled PM₁₀ for the filter vents is well below the 100 ton per year trigger. CAM does not apply.

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Applicability and Exemptions of Selected Subject Items

XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source			
ID No:	Requirement	Compliance Method/Provision	Notes
UNF 1 Facility Wide	Chemical Accident Prevention [40 CFR 68.10(a)]	EXEMPT – Facility does not store any of the regulated substances.	
	Volatile Organic Compounds – Loading [LAC 33:III.Chapter 2107.A]	DOES NOT APPLY- The facility does not load volatile organic compounds having a true vapor pressure in excess of 1.5 psia in excess of applicable thresholds.	
	Chemical Accidental Prevention and Minimization of Consequences [LAC 33:III.Chapter 59] STATE ONLY	EXEMPT- Storing chemicals below threshold quantities.	
Bulk Thinner Storage Tanks EQT 2 EQT 10 EQT 14 Unleaded Gasoline Tank EQT 4 EQT 11	NSPS Subpart K – Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY – Tank capacities are less than 40,000 gallons.	EQT 2, EQT 10, EQT 14 are not storing petroleum liquids.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source			
ID No:	Requirement	Compliance Method/Provision	Notes
Bulk Thinner Storage Tanks EQT 2 EQT 10 EQT 14	NSPS 40 CFR 60 Subpart Kb – Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY – Tank capacities are less than 40,000 gallons.	EQT 2, EQT 10, EQT 14 are not storing petroleum liquids
FUG 6 Solvent Cleaning	Emission Standards for Particulate Matter [LAC 33:III.1301.B]	EXEMPT – Burning of fuel comes into direct contact with process materials.	
	40 CFR 63 – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning [40 CFR 63 Subpart T]	EXEMPT – Sources do not contain any solvents listed in 40 CFR 63.460.	
EQTs 15-35	NESHAP Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	DOES NOT APPLY. The model year of the engines is earlier than the 2006 model year. [40 CFR 63.6590(a)(2)(ii)]	

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source			
ID No:	Requirement	Compliance Method/Provision	Notes
EQTs 15-35	Emission Standards for Sulfur Dioxide [LAC 33:III.1503]	EXEMPT. Units emit less than 250 tons of SO ₂ per year. [LAC 33:III.1503.C]	
EQTs 15-35	NSPS Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	DOES NOT APPLY. The model year of the engines is earlier than the 2007 model year. [40 CFR 60.4200(a)(1)(i)]	

Prevention of Significant Deterioration/Nonattainment Review

Not Applicable.

Streamlined Equipment Leak Monitoring Program

Not applicable.

MACT Requirements

MACT has been determined to be compliance with 40 CFR 63 Subpart II – National Emissions Standards for Shipbuilding and Ship Repair (Surface Coating), compliance with 40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, and compliance with 40 CFR 63 Subpart MMMM - National Emissions Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products.

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records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

The total horsepower hours used for all diesel engines at the facility shall be monitored and recorded monthly, as well as the total for over the last twelve months. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

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Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

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Air Quality Analysis

Dispersion Model(s) Used: AERMOD

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
PM ₁₀	24 hr	140.43 µg/m ³	150 µg/m ³
PM ₁₀	Annual	20.55 µg/m ³	50 µg/m ³

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

No permit shields were requested for this permit.

VI. PERIODIC MONITORING

Gulf Island Fabrication, Inc will perform all of the monitoring requirements of 40 CFR 63, Subpart II for the painting and coating operations, when applicable (FUG 1).

Gulf Island Fabrication, Inc will perform all of the monitoring requirements of 40 CFR 63, Subpart MMMM for The painting and coating operations, when applicable (FUG 1).

Baghouses will be utilized to control PM/PM₁₀. Daily visual inspections will be performed as detailed in the specific requirements to ensure compliance.

Emissions of each toxic air pollutant (TAP) shall be calculated and recorded monthly, as well as the total for each TAP over the last twelve months. These